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EXAMINER

NGUYEN, THU HA T

ART UNIT PAPER NUMBER

2155

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/534,592

Applicant(s)

DUTTA, RABINDRANATH

Examiner

Thu Ha T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims **1-24** are presented for examination.
2. Claims 1, 2, 9, 10, 17, and 18 are currently amended.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 2, 2005 has been entered.

Claim Objections

4. Claims 1, 9, and 17 are objected to because of the following informalities:
5. Claims 1, 9 and 17 recited the limitation "the set consisting of" in page 2, line 4; page 3, line 5; page 5, line 4. There is insufficient antecedent basis for this limitation in these claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 9-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter because of the following:

8. Claim 9 is not limited to tangible embodiments. The claim recited "A computer program product..." is just limited to a "functional descriptive material" consists of computer programs per se, instead being defined as including tangible embodiments (e.g., encoded on a computer storage medium such as nonvolatile, ROM, EEPROMs, ...[page 21 of instant specification]). As such, the claim is not limited to statutory subject matter and is therefore nonstatutory.

9. To overcome this type of 101 rejection, the examiner suggests applicant needs to amend the claim to include the physical computer medium to store the application software product, for example, the claim should be amended as "A computer program product encoded on a computer storage medium".

Also, according to specification, applicant disclosed the "Examples of computer usable mediums include: nonvolatile, hard-code type mediums such as read only memories (ROMs) or erasable, ...and CD-ROMs, and transmission type mediums such as digital and analog communication links." See specification page 21, lines 5-11. However, applicant does not differentiate the computer usable mediums such as include "storage type mediums" and "transmission type mediums". Therefore, to overcome 101 rejection, the examiner suggests applicant needs to amend the specification by adding "storage type mediums" after the words "Examples of the computer usable mediums include:" in page 21, line 6. See MPEP 2106 section V. DETERMINE WHETHER THE CLAIMED INVENTION COMPLIES WITH 35 U.S.C. 101 under subsection 1.

Nonstatutory subject matter.

10. Likewise, claims 10-16 are also rejected at least by virtue of their dependency on independent claim 9 under 35 U.S.C. 101.

11. Appropriate correction is required.

Response to Arguments

12. Applicant's arguments filed May 2, 2005 have been fully considered but they are not persuasive because of the following reasons:

13. In response to applicant's mention about telephone interview on February 4, 2005 that examiner's willingness to allow amendment of the claims to correct the deficiency related to the construction of the "or", the examiner confirms that during the telephone interview on February 4, 2005, the examiner just suggested applicant if changed the conjunction word OR to AND that would overcome the prior art rejection and the examiner did not promise for any allowance.

14. Applicant argues that the cited combination of references does not teach or suggest the feature of "determining whether a client's request to receive a file from a content server originated as a reference from one of the set consisting of the load distribution server and the content server". Applicant's argument does not commensurate with the scope of the claim.

Before addressing the argument, the Examiner submits that the language of the limitation cited in the quotation "*as a reference from one of the set consisting of the load distribution server and the content server*" containing the transitional phrase from one

of the set consisting of therein, hence, in this response, the limitation cited in the quotation is given a reasonable interpretation as determining whether a client's request to receive a file from a content server originated as a reference from the content server.

Buckland teaches a client 206 sends an access request to the first network site 200 (*i.e., content server*) in step 300. Then, the process continues to step 302 to determine if the request includes a first cookie site/first network site data block (*i.e., as a reference originated from a content server at some earlier time*) from the first network site 200, wherein as is well-known in the art that the cookie may be included in the request by the client browser 210, if the client browser 210 had accessed the first network site 200 at some earlier time (*i.e., determining whether the request originated as a reference from content server*) [see Buckland, figure 3, col. 6, lines 5-15].

Therefore, Examiner asserts that Buckland does teach the step of determining whether a client's request to receive a file from a content server originated as a reference from the content server as recited and explained above.

15. Applicant argues that Buckland does not teach or suggest the feature of "responsive to determining that the client's request to receive the file from the content server did not originate as the reference from one of the set consisting of the load distribution server and the content server, sending to the client a file requesting that the client contact the load distribution server".

In response to Applicant's argument, Examiner asserts that Buckland does teach determining that the client's request does not include a first cookie site (*i.e., a reference from content server*), and then sending to the client 206 a first message includes a

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relocated/redirected "find-user" command (*i.e.*, a *file requesting*) to contact another server (the control site 207) [see Buckland, col. 6, lines, 25-50].

Buckland does implicitly teach sending a first message having a relocated/redirected command (*i.e.*, a *file requesting*) to the client and instructing the client to contact another server (control network site 207). However, Buckland does not specially disclose a load distribution server.

Brendel, in the related prior art, teaches a load balancer 70 in the server 56 (figure 8, col. 10, lines 38-53) wherein the load balancer receives, keeps track, assigns and delivers all incoming requests from client to the assigned servers. Load balancer also attempts to balance the load of request among servers (figure 6, col. 9, lines 19-40). One of ordinary skill in the Data Processing art would have motivation to modify server (56) having load balancer (70), as disclosed by Brendel, into control network site (207), as disclosed by Buckland to have a load distribution server that controls the overload of traffic because it would provide an efficient communications system that improve to avoid data bottleneck and reduce traffic load between servers (see Brendel, col. 5, lines 55-col. 6, lines 5, col. 19, lines 55-63).

16. Applicant argues that Buckland does not teach the feature of "sending to the client a file requesting that the client contact load distribution server". In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Since

examiner admitted that Buckland does not explicitly teach load distribution server (see paragraph 7 above and also in this rejection below).

17. Applicant argues that the examiner's assertion that the control site block serves as a redirect message because the cited texts clearly label the control site block as an identification message, rather than a redirect message. Thus, Buckland does not teach or suggest the feature of "sending to the client a file requesting that the client contact the load distribution server". In response to applicant's argument, examiner asserts that the examiner already response to this point at the above response (see paragraph 7).

18. Applicant argues that Brendel does not disclose "response to determining that the client's request to receive the file from the content server did not originate as the reference from one of the set consisting of the load distribution server and the content server, sending to the client a file requesting that the client contact the load distribution server". In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

19. Applicant argues that the combination of references does not suggest one skill in the art to modify the teaching of the references to have a motivation to combine in claim 1. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by

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combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the reason to incorporate server (56) having load balancer (70), as disclosed by Brendel, into control network site (207), as disclosed by Buckland system to include a load distribution server in the system because it would provide an efficient communications system that improve to avoid data bottleneck and reduce traffic load between servers (see Brendel, col. 5, lines 55-col. 6, lines 5).

20. Applicant argues that there is no specific teaching of a motivation to combine claims 4-6. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious that the conventional redirect request/URL is used when a user experiences a redirect from one page to another by asking the user to click on a link, update bookmark or by means of automatic redirection to another site or URL that has changed or moved (see REDIRECT definition in dictionary [netlingo.com]).

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Therefore, it is obvious that redirect URL usually can notify user the change of page or URL and optionally user can update bookmark as user desired to do so. It would have been obvious to one skill in the art at the time of the invention was made to incorporate a redirection URL, as disclosed by Subramaniam into the teaching of Buckland and Brendel to include a means to update bookmark to include the load distribution server it would provide an efficient communications system that can keep track and notify redirecting/changing/ moving of URLs for a Web site so that the user can be notified and update bookmark of the changed URL (see Subramaniam, col. 7, lines 10-27).

21. Applicant argues that the updating bookmark of claim 4 does not teach or suggest in references cited. In response to applicant's argument, examiner submits that the examiner has change the ground of the rejection to include Nielsen reference that does teach the feature of updating bookmark as discussed in this rejection below.

22. As a result, cited prior arts do disclose a system and method of preventing a client from directly contacting a server that is protected by a load distribution server from an overload of traffic, as broadly claimed by the Applicant. Applicant clearly has still failed to identify specific claim limitations that would define a clearly patentable distinction over prior arts.

23. Therefore, the examiner asserts that cited prior arts teach or suggest the subject matter broadly recited in independent claims 1, 9, and 17. Claims 2-8, 10-16 and 18-24 are also rejected at least by virtue of their dependency on independent claims and by other reasons set forth in this office action. Accordingly, claims 1-24 are rejected as below.

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claims 1-3, 7, 9-11, 15, 17-19 and 23 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Buckland** U.S. Patent No. **5,999,971**, in view of **Brendel et al.**, (hereinafter **Brendel**) U.S. Patent No. **5,774,660**.

26. As to claim 1, **Buckland** teaches the invention substantially as claimed, comprising a method of:

determining whether a client's request to receive a file from a content server originated as a reference from one of the set consisting of the load distribution server and from the content server (abstract, figures 2, 3, col. 2, lines 15-32, col. 6, lines 1-24 [a client 206 sends a request to the first network site 200 (*i.e.*, *content server*) in step 300. Then, the process continues to step 302 to determine if the request includes a first cookie site/first site data block from the first network site 200, wherein as is well-known in the art that the cookie may be included in the request by the client browser 210, if the

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client browser 210 had accessed the first network site 200 at some earlier time (*i.e.*, *determine whether the request originated as a reference from content server*) [see Buckland, figure 3, col. 6, lines 5-15]); and

responsive to determining that the client's request to receive the file from the content server did not originate as the reference from one of the set consisting of the load distribution server and from the content server, sending to the client a file requesting that the client contact control network site (abstract, figures 2-3, col. 6, lines 25-37 [determining that the client's request does not include a first cookie site/first site data block (*i.e.*, *a reference from content server*), then sending to the client 206 a first message includes a "find-user" command (*i.e.*, *a file requesting*) to contact another server (the control site 207) [see Buckland, col. 6, lines, 25-50]]).

Buckland teaches sending a first message having a relocated/redirection command (*i.e.*, a file requesting) to the client and instructing the client to contact control network site (control network site 207) [see Buckland col. 6, lines 25-50].

However, **Buckland** does not specifically teach a load distribution server and protecting a server from an overload of traffic.

Brendel, in the related prior art, teaches a load balancer 70 in the server 56 (figure 8, col. 10, lines 38-53) wherein the load balancer receives, keeps track, assigns and delivers all incoming requests from client to the assigned servers. Load balancer also attempts to balance the load of request among servers (figure 6, col. 9, lines 19-40). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to incorporate server (56) having load balancer (70), as

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disclosed by **Brendel**, into control network site (207), as disclosed by **Buckland** to have a load distribution server that controls the overload of traffic because it would provide an efficient communications system to avoid data bottleneck, and to provide efficient performing load-balancing among servers and highly fault-tolerant web site (see **Brendel**, col. 5, lines 55-col. 6, lines 5, col. 19, lines 55-63).

27. As to claim 2, **Buckland** teaches the invention substantially as claimed in claim 1, further comprising: responsive to determining that the request to receive the file from the content server did originate as the reference from one of the set consisting of the load distribution server and from the content server, sending to the client the file requested (figure 3, elements 300, 302, 304, 318-320, col. 6, lines 16-24, col. 8, lines 1-40 –*determining if the request access containing first site cookie (i.e., as a reference from content server) from the first network site, then providing the client the web page (i.e., file requested) to which the client initially request access*).

28. As to claim 3, **Buckland** teaches the invention substantially as claimed in claim 1, further comprising: including in the file requesting that the client contact the control network site a means by which the client may directly contact the control network site through an initiative of a user of the client (col. 6, lines 25-67 –*the client 206 interacts with control network site 207*). However, **Buckland** does not explicitly teach the client directly contacts with the load distribution server. **Brendel**, in the related art, teaches the client directly sends request to load balancer or in the other

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word the load balancer receives all requests from clients and assigns the requests to a server (see Brendel abstract, col. 9, lines 18-40). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to incorporate a server having a load balancer, as disclosed by **Brendel**, into the system of **Buckland** to have a load distribution server that controls the traffic between clients and servers because it would provide an efficient communications system to avoid data bottleneck and to provide efficient performing load-balancing among servers and highly fault-tolerant web site (see Brendel, col. 5, lines 55-col. 6, lines 5, col. 19, lines 55-63).

29. As to claim 7, **Buckland** teaches the invention substantially as claimed, further comprising: including in the file requesting that the client contact the load distribution server a means by which the client will contact the load distribution server without intervention of the user (col. 6, lines 38-67, *col. 8, lines 58-65 – a redirect command (i.e. file requesting) automatically sends to browser and instructs control network site (207) to process the command and sends it to network site (200, 202, 204))*).

30. As to claim 9, **Buckland** teaches the invention substantially as claimed, including a computer program product comprising:

instructions for determining whether a client's request to receive a file from a content server originated as a reference from one of the set consisting of the load distribution server and from the content server (abstract, figure 2, col. 2, lines 15-32, col.

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6, lines 1-24 [a client 206 sends a request to the first network site 200 (*i.e., content server*) in step 300. Then, the process continues to step 302 to determine if the request includes a first site cookie/first network site data block (*i.e., as a reference originated from content server at some earlier time*) from the first network site 200, wherein as is well-known in the art that the cookie may be included in the request by the client browser 210, if the client browser 210 had accessed the first network site 200 at some earlier time (*i.e., determine whether the request originated as a reference from content server*) (see Buckland, figure 3, col. 6, lines 5-15)]; and

instructions for, responsive to determining that the client's request to receive the file from the content server did not originate as the reference from one of the set consisting of the load distribution server and from the content server, sending to the client a file requesting that the client contact the control network site (abstract, figures 2-3, col. 6, lines 25-37 [Buckland does teach determining that the client's request does not include a first site cookie/first network site data block (*i.e., as a reference from content server*), then sending to the client 206 a first message includes a relocated/redirection "find-user" command (*i.e., a file requesting*) to contact another server (the control site 207) (see Buckland, col. 6, lines, 25-50)].

Buckland teaches sending a first message having a relocated/redirection command (*i.e., a file requesting*) to the client and instructing the client to contact control network site (control network site 207) [see Buckland col. 6, lines 25-50].

However, **Buckland** does not specifically teach a load distribution server and protecting a server from an overload of traffic.

Brendel, in the related prior art, teaches a load balancer 70 in the server 56 (figure 8, col. 10, lines 38-53) wherein the load balancer receives, keeps track, assigns and delivers all incoming requests from client to the assigned servers. Load balancer also attempts to balance the load of request among servers (figure 6, col. 9, lines 19-40). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to incorporate a server (56) having load balancer (70), as disclosed by **Brendel**, into control network site (207), as disclosed by **Buckland** to have a load distribution server that controls the overload of traffic because it would provide an efficient communications system to avoid data bottleneck, and to provide efficient performing load-balancing among servers and highly fault-tolerant web site (see **Brendel**, col. 5, lines 55-col. 6, lines 5, col. 19, lines 55-63).

31. As to claim 10, **Buckland** teaches the invention substantially as claimed in claim 9, further comprising: instruction for, responsive to determining that the request to receive the file from the content server did originate as the reference from one of the set consisting of the load distribution server and from the content server, sending to the client the file requested (figure 3, elements 300, 302, 304, 318-320, col. 6, lines 16-24, col. 8, lines 1-40 –*determining if the request access containing first site cookie (i.e., as a reference from content server) from the first network site, then providing the client the web page (i.e., file requested) to which the client initially request access*).

32. As to claim 11, **Buckland** teaches the invention substantially as claimed in claim 9, further comprising: instruction for including in the file requesting that the client contact the control network site a means by which the client may directly contact the control network site through an initiative of a user of the client (col. 6, lines 25-67 –*the client 206 interacts with control network site 207*).

However, **Buckland** does not explicitly teach the client directly contacts with the load distribution server.

Brendel, in the related art, teaches the client directly sends request to load balancer or in the other word the load balancer receives all requests from clients and assigns the requests to a server (see Brendel abstract, col. 9, lines 18-40).

It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to incorporate a server having a load balancer, as disclosed by **Brendel**, into the system of **Buckland** to have a load distribution server that controls the traffic between clients and servers because it would provide an efficient communications system to avoid data bottleneck and to provide efficient performing load-balancing among servers and highly fault-tolerant web site (see Brendel, col. 5, lines 55-col. 6, lines 5, col. 19, lines 55-63).

33. As to claim 15, **Buckland** teaches the invention substantially as claimed in claim 9, further comprising: instruction for including in the file requesting that the client contact the load distribution server a means by which the client will contact the load distribution server without intervention of the user (col. 6, lines 38-67, *col. 8, lines 58-65*

– a redirect command (*i.e.* file requesting) automatically sends to browser and instructs control network site (207) to process the command and sends it to network site (200, 202, 204)).

34. As to claim 17, **Buckland** teaches the invention substantially as claimed, including a system comprising:

means for determining whether a client's request to receive a file from a content server originated as a reference from one of the set consisting of the load distribution server and from the content server (abstract, figure 2, col. 2, lines 15-32, col. 6, lines 1-24 [a client 206 sends a request access to the first network site 200 (*i.e.*, *content server*) in step 300. Then, the process continues to step 302 to determine if the request includes a first site cookie/first network site data block (*i.e.*, *as a reference from content server at some earlier time*) from the first network site 200, wherein as is well-known in the art that the cookie may be included in the request by the client browser 210, if the client browser 210 had accessed the first network site 200 at some earlier time (*i.e.*, *determine whether the request originated as a reference from content server*) (see Buckland, figure 3, col. 6, lines 5-15)];

means for, responsive to determining that the client's request to receive the file from the content server did not originate as the reference from one of the set consisting of the load distribution server and from the content server, sending to the client a file requesting that the client contact the control network site (abstract, figures 2-3, col. 6, lines 25-37 [Buckland does teach determining that the client's request does not include

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a first cookie site (*i.e.*, a reference from content server), then sending to the client 206 a first message includes a relocated/redirectioned "find-user" command (*i.e.*, a file requesting) to contact another server (the control site 207) (see Buckland, col. 6, lines, 25-50)].

Buckland teaches sending a first message having a relocated/redirectioned command (*i.e.*, a file requesting) to the client and instructing the client to contact control network site (control network site 207) [see Buckland col. 6, lines 25-50].

However, **Buckland** does not specifically teach a load distribution server and protecting a server from an overload of traffic.

Brendel, in the related prior art, teaches a load balancer 70 in the server 56 (figure 8, col. 10, lines 38-53) wherein the load balancer receives, keeps track, assigns and delivers all incoming requests from client to the assigned servers. Load balancer also attempts to balance the load of request among servers (figure 6, col. 9, lines 19-40). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to incorporate a server (56) having load balancer (70), as disclosed by **Brendel**, into control network site (207), as disclosed by **Buckland** to have a load distribution server that controls the overload of traffic because it would provide an efficient communications system to avoid data bottleneck, and to provide efficient performing load-balancing among servers and highly fault-tolerant web site (see Brendel, col. 5, lines 55-col. 6, lines 5, col. 19, lines 55-63).

35. As to claim 18, **Buckland** teaches the invention substantially as claimed in claim 17, further comprising: means for, responsive to determining that the request to receive the file from the content server did originate as the reference from one of the set consisting of the load distribution server and from the content server, sending to the client the file requested (figure 3, elements 300, 302, 304, 318-320, col. 6, lines 16-24, col. 8, lines 1-40 *—determining if the request access containing first site cookie (i.e., as a reference from content server) from the first network site, then providing the client the web page (i.e., file requested) to which the client initially request access*).

36. As to claim 19, **Buckland** teaches the invention substantially as claimed in claim 17, further comprising: means: included in the file requesting that the client contact the control network site a means by which the client may directly contact the control network site through an initiative of a user of the client (col. 6, lines 25-67 *—the client 206 interacts with control network site 207*).

However, **Buckland** does not explicitly teach the client directly contacts with the load distribution server.

Brendel, in the related art, teaches the client directly sends request to load balancer or in the other word the load balancer receives all requests from clients and assigns the requests to a server (see Brendel abstract, col. 9, lines 18-40).

It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to incorporate a server having a load balancer, as disclosed by **Brendel**, into the system of **Buckland** to have a load distribution server

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that controls the traffic between clients and servers because it would provide an efficient communications system to avoid data bottleneck and to provide efficient performing load-balancing among servers and highly fault-tolerant web site (see Brendel, col. 5, lines 55-col. 6, lines 5, col. 19, lines 55-63).

37. As to claim 23, **Buckland** teaches the invention substantially as claimed in claim 17, further comprising: means, included in the file requesting that the client contact the load distribution server a means by which the client will contact the load distribution server without intervention of the user (col. 6, lines 38-67, *col. 8, lines 58-65 – a redirect command (i.e. file requesting) automatically sends to browser and instructs control network site (207) to process the command and sends it to network site (200, 202, 204))*).

38. Claims 4-6, 12-14, and 20-22 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Buckland** U.S. Patent No. **5,999,971**, and **Brendel et al.**, (hereinafter Brendel) U.S. Patent No. **5,774,660**, further in view of **Nielsen** U.S. Patent No. **5,813,007**.

39. As to claim 4, **Buckland and Brendel** system substantially teaches the feature of offering in the file requesting that the client contact the load distribution server as substantially claimed in claim 1, and also teaches when the client contacts the control network site, the control cookie site is dropped/stored and then the client has

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bookmarked the control network site (col. 6, lines 51-67, col. 7, lines 29-43, col. 8, lines 41-57).

However, **Buckland and Brendel** system does not explicitly teach a means to update a bookmark file.

Nielsen, in the related art, teaches the feature of sending an email notification to inform client updating a bookmark file when there is a sufficient changes to a web page (figure 3, col. 9, lines 14-60, col. 12, line 15-col. 13, line 61).

It would have been obvious to one skill in the art at the time of the invention was made to incorporate the feature of updating a bookmark file, as disclosed by **Nielsen** into the system of **Buckland and Brendel** to include a means to update bookmark file because it were conventionally employed in the art to provide a useful and enhance system that monitor the sufficient changes of bookmarked information file/Web page so that the user can be notified and update bookmark of the changed information file/Web page (see Nielsen col. 1, lines 6-14, col. col. 4, lines 12-39).

40. As to claim 5, **Buckland and Brendel** system substantially teaches the feature of offering in the file requesting that the client contact the load distribution server as substantially claimed in claim 4, and also teaches when the client contacts the control network site, the control cookie site is dropped/stored and then the client has bookmarked the control network site (col. 6, lines 51-67, col. 7, lines 29-43, col. 8, lines 41-57).

However, **Buckland and Brendel** system does not explicitly teach a means to update a bookmark file to exclude the content server.

Nielsen, in the related art, teaches the feature of sending an email notification to inform client updating a bookmark file when there is a sufficient changes to a web page (figure 3, col. 9, lines 14-60, col. 12, line 15-col. 13, line 61). While the client updates the bookmark file of the changed of information file/web page, it is obvious that the previous bookmarked information file/web page is excluded.

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to incorporate the feature of updating a bookmark file, as disclosed by **Nielsen** into the system of **Buckland and Brendel** to include a means to update bookmark file because it were conventionally employed in the art to provide a useful and enhance system that monitor the sufficient changes of bookmarked information file/Web page so that the user can be notified and update bookmark of the changed information file/Web page (see Nielsen col. 1, lines 6-14, col. col. 4, lines 12-39).

41. As to claim 6, **Buckland and Brendel** system substantially teaches the feature of offering in the file requesting that the client contact the load distribution server as substantially claimed in claim 4, and also teaches when the client contacts the control network site, the control cookie site is dropped/stored and then the client has bookmarked the control network site (col. 6, lines 51-67, col. 7, lines 29-43, col. 8, lines 41-57).

However, **Buckland and Brendel** system does not explicitly teach a means to update a bookmark file to include the load distribution server and exclude the content server.

Nielsen, in the related art, teaches the feature of sending an email notification to inform client updating a bookmark file when there is a sufficient changes to a web page (figure 3, col. 9, lines 14-60, col. 12, line 15-col. 13, line 61). While the client updates the bookmark file of the changed of information file/web page, it is obvious that the previous bookmarked information file/web page is excluded.

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to incorporate the feature of updating a bookmark file, as disclosed by **Nielsen** into the system of **Buckland and Brendel** to include a means to update bookmark file because it were conventionally employed in the art to provide a useful and enhance system that monitor the sufficient changes of bookmarked information file/Web page so that the user can be notified and update bookmark of the changed information file/Web page (see Nielsen col. 1, lines 6-14, col. col. 4, lines 12-39).

42. As to claim 12, **Buckland and Brendel** system substantially teaches the feature of offering in the file requesting that the client contact the load distribution server as substantially claimed in claim 9, and also teaches when the client contacts the control network site, the control cookie site is dropped/stored and then the client has bookmarked the control network site (col. 6, lines 51-67, col. 7, lines 29-43, col. 8, lines 41-57).

However, **Buckland and Brendel** system does not explicitly teach a means to update a bookmark file.

Nielsen, in the related art, teaches the feature of sending an email notification to inform client updating a bookmark file when there is a sufficient changes to a web page (figure 3, col. 9, lines 14-60, col. 12, line 15-col. 13, line 61).

It would have been obvious to one skill in the art at the time of the invention was made to incorporate the feature of updating a bookmark file, as disclosed by **Nielsen** into the system of **Buckland and Brendel** to include a means to update bookmark file because it were conventionally employed in the art to provide a useful and enhance system that monitor the sufficient changes of bookmarked information file/Web page so that the user can be notified and update bookmark of the changed information file/Web page (see Nielsen col. 1, lines 6-14, col. col. 4, lines 12-39).

43. As to claim 13, **Buckland and Brendel** system substantially teaches the feature of offering in the file requesting that the client contact the load distribution server as substantially claimed in claim 12, and also teaches when the client contacts the control network site, the control cookie site is dropped/stored and then the client has bookmarked the control network site (col. 6, lines 51-67, col. 7, lines 29-43, col. 8, lines 41-57).

However, **Buckland and Brendel** system does not explicitly teach a means to update a bookmark file to exclude the content server.

Nielsen, in the related art, teaches the feature of sending an email notification to inform client updating a bookmark file when there is a sufficient changes to a web page (figure 3, col. 9, lines 14-60, col. 12, line 15-col. 13, line 61). While the client updates the bookmark file of the changed of information file/web page, it is obvious that the previous bookmarked information file/web page is excluded.

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to incorporate the feature of updating a bookmark file, as disclosed by **Nielsen** into the system of **Buckland and Brendel** to include a means to update bookmark file because it were conventionally employed in the art to provide a useful and enhance system that monitor the sufficient changes of bookmarked information file/Web page so that the user can be notified and update bookmark of the changed information file/Web page (see Nielsen col. 1, lines 6-14, col. col. 4, lines 12-39).

44. As to claim 14, **Buckland and Brendel** system substantially teaches the feature of offering in the file requesting that the client contact the load distribution server as substantially claimed in claim 12, and also teaches when the client contacts the control network site, the control cookie site is dropped/stored and then the client has bookmarked the control network site (col. 6, lines 51-67, col. 7, lines 29-43, col. 8, lines 41-57).

However, **Buckland and Brendel** system does not explicitly teach a means to update a bookmark file to include the load distribution server and exclude the content server.

Nielsen, in the related art, teaches the feature of sending an email notification to inform client updating a bookmark file when there is a sufficient changes to a web page (figure 3, col. 9, lines 14-60, col. 12, line 15-col. 13, line 61). While the client updates the bookmark file of the changed of information file/web page, it is obvious that the previous bookmarked information file/web page is excluded.

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to incorporate the feature of updating a bookmark file, as disclosed by **Nielsen** into the system of **Buckland and Brendel** to include a means to update bookmark file because it were conventionally employed in the art to provide a useful and enhance system that monitor the sufficient changes of bookmarked information file/Web page so that the user can be notified and update bookmark of the changed information file/Web page (see Nielsen col. 1, lines 6-14, col. col. 4, lines 12-39).

45. As to claim 20, **Buckland and Brendel** system substantially teaches the feature of offering in the file requesting that the client contact the load distribution server as substantially claimed in claim 17, and also teaches when the client contacts the control network site, the control cookie site is dropped/stored and then the client has bookmarked the control network site (col. 6, lines 51-67, col. 7, lines 29-43, col. 8, lines 41-57).

However, **Buckland and Brendel** system does not explicitly teach a means to update a bookmark file.

Nielsen, in the related art, teaches the feature of sending an email notification to inform client updating a bookmark file when there is a sufficient changes to a web page (figure 3, col. 9, lines 14-60, col. 12, line 15-col. 13, line 61).

It would have been obvious to one skill in the art at the time of the invention was made to incorporate the feature of updating a bookmark file, as disclosed by **Nielsen** into the system of **Buckland and Brendel** to include a means to update bookmark file because it were conventionally employed in the art to provide a useful and enhance system that monitor the sufficient changes of bookmarked information file/Web page so that the user can be notified and update bookmark of the changed information file/Web page (see Nielsen col. 1, lines 6-14, col. col. 4, lines 12-39).

46. As to claim 21, **Buckland and Brendel** system substantially teaches the feature of offering in the file requesting that the client contact the load distribution server as substantially claimed in claim 20, and also teaches when the client contacts the control network site, the control cookie site is dropped/stored and then the client has bookmarked the control network site (col. 6, lines 51-67, col. 7, lines 29-43, col. 8, lines 41-57).

However, **Buckland and Brendel** system does not explicitly teach a means to update a bookmark file to exclude the content server.

Nielsen, in the related art, teaches the feature of sending an email notification to inform client updating a bookmark file when there is a sufficient changes to a web page (figure 3, col. 9, lines 14-60, col. 12, line 15-col. 13, line 61). While the client updates

the bookmark file of the changed of information file/web page, it is obvious that the previous bookmarked information file/web page is excluded.

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to incorporate the feature of updating a bookmark file, as disclosed by **Nielsen** into the system of **Buckland and Brendel** to include a means to update bookmark file because it were conventionally employed in the art to provide a useful and enhance system that monitor the sufficient changes of bookmarked information file/Web page so that the user can be notified and update bookmark of the changed information file/Web page (see Nielsen col. 1, lines 6-14, col. col. 4, lines 12-39).

47. As to claim 22, **Buckland and Brendel** system substantially teaches the feature of offering in the file requesting that the client contact the load distribution server as substantially claimed in claim 20, and also teaches when the client contacts the control network site, the control cookie site is dropped/stored and then the client has bookmarked the control network site (col. 6, lines 51-67, col. 7, lines 29-43, col. 8, lines 41-57).

However, **Buckland and Brendel** system does not explicitly teach a means to update a bookmark file to include the load distribution server and exclude the content server.

Nielsen, in the related art, teaches the feature of sending an email notification to inform client updating a bookmark file when there is a sufficient changes to a web page (figure 3, col. 9, lines 14-60, col. 12, line 15-col. 13, line 61). While the client updates

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the bookmark file of the changed of information file/web page, it is obvious that the previous bookmarked information file/web page is excluded.

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to incorporate the feature of updating a bookmark file, as disclosed by **Nielsen** into the system of **Buckland and Brendel** to include a means to update bookmark file because it were conventionally employed in the art to provide a useful and enhance system that monitor the sufficient changes of bookmarked information file/Web page so that the user can be notified and update bookmark of the changed information file/Web page (see Nielsen col. 1, lines 6-14, col. col. 4, lines 12-39).

48. Claims 8, 16 and 24 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Buckland** U.S. Patent No. **5,999,971**, and **Brendel et al.**, (hereinafter Brendel) U.S. Patent No. **5,774,660**, further in view of **Subramaniam et al.**, (hereinafter Subramaniam) U.S. Patent No. **6,081,900**.

49. As to claim 8, **Buckland and Brendel** system teaches the invention substantially as claimed in claim 7, further comprising: including in the file requesting that the client contact the load distribution server without intervention of user (col. 6, lines 38-67, col. 8, lines 58-65 – *a redirect command (i.e. file requesting) automatically sends to browser and instructs control network site (207) to process the command and sends it to network site (200, 202, 204)*).

Buckland and Brendel does not explicitly teach a means by which to allow the user of the client sufficient time to read and react to the file requesting that the user of the client contact the load distribution server.

However; **Subramaniam** teaches a redirect request sends from target server (104) through external client (112) to border server (106) and has conventional capabilities to automatically redirect client when a web site has moved/the URL for the web site has changed to another URL (col. 6, line 47-col. 7, line 58). It is obvious that the conventional redirect request/URL is used when a user experiences a redirect from one page to another by asking the user to click on a link or by means of automatic redirection. It may leave a page on server to notify user whoever access to that page that the name has changed or moved, thus, it has to give the user sufficient time to read and react with that notify.

Therefore, it were conventionally employed in the art to incorporate the feature of redirecting URL capability, as disclosed by **Subramaniam**, into system of **Buckland and Brendel** because it would provide a system has capability to notify the redirecting/moving/changing of URLs for a web site thus the user can be notified and react to the change (i.e., update bookmark) if user desires to do so (see Subramaniam col. 7, lines 1-10 and also see REDIRECT dictionary definition at netlingo.com).

50. As to claim 16, **Buckland and Brendel** system teaches the invention substantially as claimed in claim 15, further comprising: instruction for including in the file requesting that the client contact the load distribution server without intervention of

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user (col. 6, lines 38-67, col. 8, lines 58-65 – a redirect command (i.e. file requesting) automatically sends to browser and instructs control network site (207) to process the command and sends it to network site (200, 202, 204)).

Buckland and Brendel does not explicitly teach a means by which to allow the user of the client sufficient time to read and react to the file requesting that the user of the client contact the load distribution server.

However, **Subramaniam** teaches a redirect request sends from target server (104) through external client (112) to border server (106) and has conventional capabilities to automatically redirect client when a web site has moved/the URL for the web site has changed to another URL (col. 6, line 47-col. 7, line 58). It is obvious that the conventional redirect request/URL is used when a user experiences a redirect from one page to another by asking the user to click on a link or by means of automatic redirection. It may leave a page on server to notify user whoever access to that page that the name has changed or moved, thus, it has to give the user sufficient time to read and react with that notify.

Therefore, it were conventionally employed in the art to incorporate the feature of redirecting URL capability, as disclosed by **Subramaniam**, into system of **Buckland and Brendel** because it would provide a system has capability to notify the redirecting/moving/changing of URLs for a web site thus the user can be notified and react to the change (i.e., update bookmark) if user desires to do so (see Subramaniam col. 7, lines 1-10 and also see REDIRECT dictionary definition at netlingo.com).

51. As to claim 24, **Buckland and Brendel** system teaches the invention substantially as claimed in claim 23, further comprising: including in the file requesting that the client contact the load distribution server without intervention of user (col. 6, lines 38-67, col. 8, lines 58-65 – *a redirect command (i.e. file requesting) automatically sends to browser and instructs control network site (207) to process the command and sends it to network site (200, 202, 204)*)).

Buckland and Brendel does not explicitly teach a means by which to allow the user of the client sufficient time to read and react to the file requesting that the user of the client contact the load distribution server.

However, **Subramaniam** teaches a redirect request sends from target server (104) through external client (112) to border server (106) and has conventional capabilities to automatically redirect client when a web site has moved/the URL for the web site has changed to another URL (col. 6, line 47-col. 7, line 58). It is obvious that the conventional redirect request/URL is used when a user experiences a redirect from one page to another by asking the user to click on a link or by means of automatic redirection. It may leave a page on server to notify user whoever access to that page that the name has changed or moved, thus, it has to give the user sufficient time to read and react with that notify.

Therefore, it were conventionally employed in the art to incorporate the feature of redirecting URL capability, as disclosed by **Subramaniam**, into system of **Buckland and Brendel** because it would provide a system has capability to notify the redirecting/moving/changing of URLs for a web site thus the user can be notified and

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react to the change (i.e., update bookmark) if user desires to do so (see Subramaniam col. 7, lines 1-10 and also see REDIRECT dictionary definition at netlingo.com).

Conclusion

52. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

a) Jorgenson (USPN 6,813,635), discloses system and method for distributing load among redundant independent stateful web server sites.

b) Soderberg et al. (USPN 6,865,605), discloses system and method for transparent redirecting client requests from content such as a client system is unaware of the redirection.

c) Jungck (US. Pub. No. 2005/0021863), discloses system and method for virtual edge placement of web sites.

d) Devine et al. (US. Pub. No. 2005/0114712), discloses system and method for protecting remote enterprise servers that provide communication services to customers from unauthorized third parties.

e) Lita (EP 1 041 496 A2), discloses system and method using virtual URLs for load balancing.

53. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Ha Nguyen, whose telephone number is (571) 272-3989. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Najjar Saleh, can be reached at (571) 272-4006.

The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ThuHa Nguyen
Patent Examiner

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